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Editorial

Hang on! The light at the end of the tunnel is not an oncoming train!

—Author Unknown

I know you may be feeling like you have already been hit by a train! And so, I hope this quote makes you smile! As many of you continue to hang on – for dear life, my wish for you is that you continue to make the time to pause, and smile!

In this issue of the CJC/N, we are pleased to share two very interesting and informative papers, which are both very relevant to you, as cardiovascular nurses! First, Laura Duchesne and Dr. Krystina Lewis report on a case study regarding decisional support for a patient experiencing decisional conflict about catheter ablation for SVT. Second, Cassidy Van Stiphout and colleagues share the findings of their QI project in which they surveyed healthcare providers regarding their obesity-related knowledge, attitudes, beliefs, and perceptions of opportunity for interventions.

I hope you all had the time to read the brief, informational open call for new CJC/N Editorial Board members in our last

issue. If you didn't see it, you can still go back and review it! This feature outlines the duties and responsibilities of Editorial Board Members, the criteria for appointment, and most importantly, our Associate Editors' perspectives of the learning opportunities and other benefits of this role. *FYI: We are still seeking both English- and French-speaking applicants for this important role! Please see the announcement regarding this opportunity in this issue and contact me directly if you have questions.

Finally, I draw your attention to the poster in this issue for the 2023 CCCN Spring Conference in Quebec City!! The success of this conference depends on all of you! I encourage you to consider attending this interesting, informative, and fun conference planned specifically for all of you – Canada's cardiovascular nurses!

**Happy Reading &
Wishing you all a Joy Filled Holiday Season and a
Happy and Healthy 2023!**

**Jo-Ann V. Sawatzky, RN, PhD
Editor in Chief, CJC/N**

OPPORTUNITY

Associate Editors & Guest Peer Reviewers for the Canadian Journal of Cardiovascular Nursing

We are currently seeking **Associate Editors** and **Guest Peer Reviewers** for the *Canadian Journal of Cardiovascular Nursing* (CJC/N). Required qualifications include:

- At least 5 years of cardiovascular nursing experience
- A current CCCN membership
- A minimum of master's preparation
- Experience in publishing in peer-reviewed journals

We encourage qualified nurses to consider these rewarding roles. Experience reviewing manuscripts is preferred for the Associate Editor role. The Guest Peer Reviewer role is an ideal way to gain experience reviewing manuscripts, with guidance and support from the Editor. Guest peer reviewers should possess subject-matter expertise in the topic of the paper to be reviewed.

This is an opportunity to learn and grow, and to share your knowledge and expertise in the area of cardiovascular nursing scholarship and publishing! For further information on these opportunities to participate in the CJC/N publication process, please contact CCCN Director of Publications & CJC/N Editor, Dr. Jo-Ann Sawatzky at joanne.sawatzky@umanitoba.ca

OPPORTUNITÉ

Rédacteurs adjoints et évaluateurs invités pour la Revue canadienne de soins infirmiers cardiovasculaires

Nous sommes actuellement à la recherche de rédacteurs adjoints et d'évaluateurs invités pour la revue canadienne de soins infirmiers cardiovasculaires. Les qualifications requises pour ces postes sont les suivantes:

- Au moins 5 ans d'expérience en soins infirmiers cardiovasculaires
- Être membre en règle du Conseil canadien des infirmières et infirmiers en soins cardiovasculaires
- Préparation à la maîtrise, au minimum
- Avoir publié dans des revues évaluées par les pairs

Nous encourageons les infirmières et infirmiers qualifiés à envisager ces rôles enrichissants. De l'expérience avec la révision de manuscrits est préférable pour le poste de rédacteur adjoint. Le rôle d'évaluateur invité est un moyen idéal d'acquérir de l'expérience dans la révision de manuscrits, avec les conseils et le soutien de la rédactrice en chef. Les évaluateurs invités doivent posséder une expertise dans le domaine du manuscrit à évaluer.

C'est une occasion d'apprendre et de développer ses compétences professionnelles, et de partager vos connaissances et votre expertise dans le domaine de la recherche et de l'écriture en soins infirmiers cardiovasculaires. Pour obtenir de plus amples renseignements sur ces postes, veuillez communiquer avec la directrice des communications et rédactrice en chef de la RCSIC, D^{re} Jo-Ann Sawatzky, à l'adresse joanne.sawatzky@umanitoba.ca.

Decision Support for Supraventricular Tachycardia Treatment: A Case Study

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Abstract

Background: Individuals with supraventricular tachycardia (SVT) may face difficulties when making decisions about their treatment options.

Purpose: To evaluate the decision support provided by a cardiovascular nurse to a patient experiencing decisional conflict about catheter ablation for SVT.

Methods: In this Ottawa Decision Support Framework-guided case study, decision support was provided using decision coaching and a patient decision aid (PDA) and evaluated using the Decision Support Analysis Tool (DSAT)-10 and changes in the patient's Sure of myself; Understand information; Risk-benefit ratio; Encouragement (SURE) test.

Results: The patient's SURE test score improved from 0/4 to 3/4 after the intervention. The patient chose not to have a catheter ablation, as the inconvenience of the procedure and perceived necessity were highly valued. The DSAT-10 revealed that high-quality decision support was provided.

Implications for Practice: Decision coaching combined with a PDA may reduce decisional conflict and promote informed values-based decisions for people with SVT considering catheter ablation.

Keywords: decision making, decisional conflict, decision support techniques, tachycardia, supraventricular

Duchesne, L., & Lewis, K. B. (2022). Decision support for supraventricular tachycardia treatment: A case study. *Canadian Journal of Cardiovascular Nursing*, 32(2), 4–10.

Supraventricular tachycardia (SVT) is an umbrella term used to describe a group of arrhythmias that cause the heart rate to exceed 100 beats per minute. These arrhythmias include atrioventricular nodal re-entrant tachycardia (AVNRT), atrioventricular re-entrant tachycardia (AVRT), atrial tachycardia, atrial flutter, and atrial fibrillation (Brugada et al., 2020). Supraventricular tachycardia presents with rapid regular tachycardia, usually with an abrupt onset and termination, often causing disruptive symptoms in those affected (Nordblom et al., 2022). While Canadian data on SVT is lacking, the prevalence of SVT in the general population is 2.25 per 1000/year, with approximately 50,000 emergency room visits annually in the United States (Brugada et al., 2020; Page et al., 2016). Management for SVTs includes vagal manoeuvres, pharmacological agents, and electrophysiological procedures, such as cardiac ablation.

Individuals with cardiac arrhythmias, such as SVT, may face difficulties when considering their treatment options and they often report a lack of information regarding these options (Withers et al., 2015). Important factors to be considered include the frequency and intensity of their SVT episodes and its impact on their quality of life, as well as the risks associated with the treatment options, which may include vagal manoeuvres, medications, and cardiac ablation (Helton, 2015). When properly performed, vagal manoeuvres

may be an appropriate short-term treatment in some patients who are hemodynamically stable. However, their success rates vary between 6% to 54% (Page et al., 2016; Sohinki & Obel, 2014). If these manoeuvres fail, medications can be considered. Yet, pharmacotherapy is not a definitive treatment, as it is not effective for everyone and it is associated with side effects that may not be tolerable to some patients (Katrtsis et al., 2017). Catheter ablation, which has a success rate of 95%, can significantly improve quality of life (Brugada et al., 2020; Katrtsis et al., 2017). However, ablation is an invasive procedure, and as such, is not without risks.

Individuals facing health-related decisions can experience decisional conflict, which is defined as a state of uncertainty about which option to choose (Hoefel et al., 2020). This uncertainty is more likely when an individual is facing choices involving risk or uncertainty of outcomes, when there is a need to make value trade-offs, and when personal values are challenged (O'Connor, 2006). Healthcare professionals can support individuals facing health decisions with evidence-based decision support interventions, such as patient decision aids (PDA) and decision coaching (Jull et al., 2021; Stacey et al., 2017).

Patient decision aids are designed to help individuals engage in decision-making with their healthcare providers by providing, clarifying, and summarizing information on

various treatment options (O'Connor et al., 2015). A systematic review of 105 trials demonstrated that PDAs are effective in improving decision quality, improving active participation in the decision-making process, and facilitating better patient-clinician communication (Stacey et al., 2017). Decision coaching is an intervention provided by a trained health provider to facilitate individualized non-directive support to assist people in making health or social decisions (Rahn et al., 2021). A systematic review of 28 trials showed that decision coaching, with or without evidence-based information, may improve patient knowledge, as well as patient participation and satisfaction (Jull et al., 2021).

Nurses play a crucial role in shared decision-making and decision support by providing patients with meaningful evidence-based information and supporting decisions that are in concordance with their personal values (Lewis et al., 2014; Olling et al., 2021). In this article, we present the case of an individual experiencing decisional conflict while considering his treatment options for SVT. The aim of this case study was to evaluate the decision support provided by a cardiovascular nurse to a patient deciding whether or not to have a catheter ablation.

The Case

Bill (name changed to preserve anonymity) is a previously healthy, 51-year-old man diagnosed with SVT in the spring of 2019 and is becoming increasingly concerned with recurrent symptoms. His symptoms include an unpredictable, sudden onset of palpitations, with a heart rate of 200 beats per minute, light-headedness, and a generalized feeling of unease and anxiety. When he was first diagnosed, these episodes occurred several times a week. Now, he experiences them once or twice a month. Although the symptoms resolve with the Valsalva manoeuvre, this occasionally results in a presyncope event. Bill is employed full-time in the healthcare field and finds these symptoms interfere with his work life. He prefers not to take medications due to the infrequency of the symptoms and is contemplating whether an ablation is the right treatment for him. His wife and physician are actively involved in the decision-making process. Bill has proficient skills in reading and speaking English and, given his field of work, feels he is able to readily engage with and understand health-related information.

Methods

Theoretical Framework

The Ottawa Decision Support Framework (ODSF) guides practitioners to assess patients' decisional needs, provide decisional support to address unresolved decisional needs, and evaluate decision quality and outcomes (Stacey et al., 2020). Quality decisions are defined as informed and based on the patient's preferences and values. The ODSF was used to guide the structure and flow of the decision coaching session, as well as the selected measures, namely

the Sure of myself; Understand information; Risk-benefit ratio; Encouragement (SURE) test, to screen for decisional conflict, (Légaré et al., 2010) and Decision Support Analysis Tool (DSAT-10), to evaluate the quality of the decision coaching offered (Stacey et al., 2008).

Study Design

A prospective case study using Yin's approach was conducted. Case study methodology enables researchers to gain a deeper understanding of individual(s) experiences and preferences (Yin, 2017). Case studies enable healthcare providers and researchers to gather a holistic view of a person's situation by providing them with opportunities to express their ideas and concerns (Yin, 2017). The University of Ottawa Research Ethics Board approved the study (File number: NSG6133/6533), which was completed as an assignment within a graduate nursing course. Written informed consent was obtained from the patient.

Participant Selection and Procedures

A patient was conveniently sampled from a clinic at a tertiary cardiac institution in Ottawa. In the year 2021 to 2022, this institution performed 814 ablations (University of Ottawa Heart Institute, 2022). This patient was eligible for this case study as he was experiencing decisional conflict as to whether or not to undergo an ablation to treat SVT. The patient had the capacity to provide informed written consent to participate.

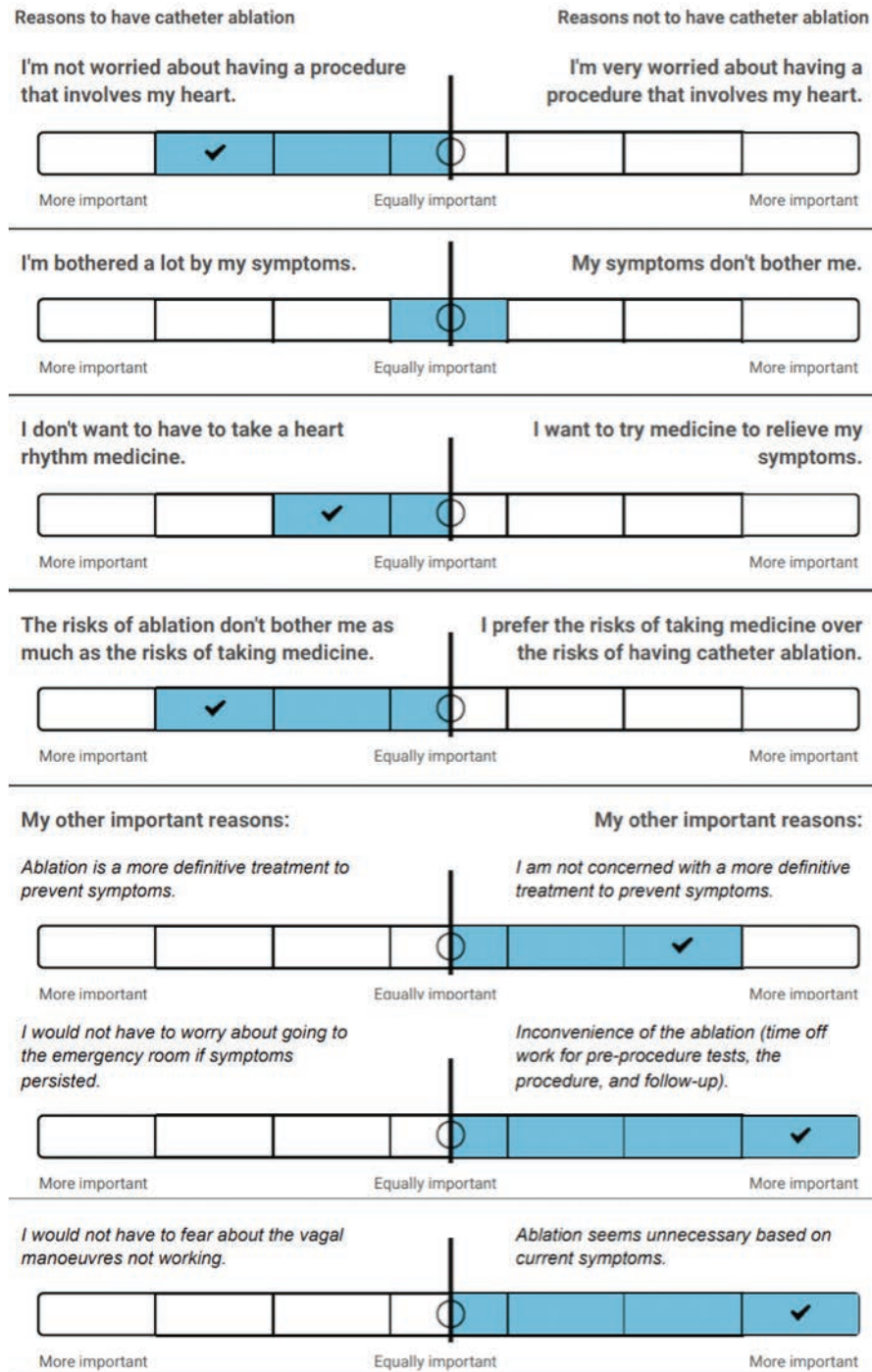
The decision coach, a nurse graduate student with expertise in cardiovascular nursing, successfully completed decision coach training through the Ottawa Decision Support Tutorial (O'Connor et al., 2015) and a graduate level course in decision-making. The patient and decision coach met twice. During the first encounter, the patient completed a baseline SURE test to confirm the presence of decisional conflict. Prior to the decision coaching session, the patient was asked to review a PDA about whether or not to have a catheter ablation for SVT. One week after the initial encounter, the nurse graduate student met with the patient to review the PDA and provide structured decision coaching. The patient completed a second SURE test and provided responses to open-ended questions about the usefulness of the decision coaching directly after the session. The session lasted 42 minutes and was audio-recorded to assist with qualitative data analysis.

Decision Support Interventions

In this case study, decision coaching was combined with the support of a PDA. The Healthwise organization created a PDA specifically aimed to assist patients when deciding whether or not to have a catheter ablation to treat SVT (Healthwise, 2019). This decision aid provides patients with facts about ablation, compares the options (i.e., ablation versus no ablation; see Figure 1), and helps determine the patient's next steps. This tool also includes a values

Figure 1

Patient's Values Clarification Exercise from Healthwise's (2019) Patient Decision Aid for Supraventricular Tachycardia Catheter Ablation^{1,2}



¹Other important reasons are as indicated by the patient.

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clarification exercise, to help patients clarify which option matters the most to them by ranking reasons to have or not have an ablation on a scale of zero to five (i.e., 0 = not important; 5 = most important). The Flesh-Kincaid readability grade level of this PDA was 7.5. Based on the International Patient Decision Aids Standards instrument (v4.0) checklist (Joseph-Williams et al., 2014), this is a high quality PDA, with a low risk for biased decision-making.

Measurement Instruments and Analysis

We used the SURE test (Légaré et al., 2010) pre and post the decision-coaching session, to evaluate the impact of the decision-coaching session on the patient’s level of decisional conflict. The SURE test is a simple four-item instrument based on the ODSF, used to screen for decisional conflict. Scores of less than four indicate decisional conflict. The level of decisional conflict decreases as the SURE test score increases. This validated instrument has demonstrated adequate internal consistency in a primary care population with patients experiencing decisional conflict (Ferron Parayre et al., 2013). Changes in the SURE test results between pre and post decision-coaching sessions were analyzed descriptively.

We used the DSAT-10, which is based on the ODSF, to evaluate the quality of the decision support provided to the patient at the end of the second encounter (Stacey et al., 2008). This tool consists of 16 items that are divided into five domains, including decision-making status, knowledge of options, values and preferences, others’ involvement in the decision, and next steps (Stacey et al., 2015). The DSAT-10 is scored from zero to 10; higher scores indicate higher quality support. This instrument has adequate inter-rater-reliability and can discriminate between trained and untrained nurses providing decision support (Stacey et al., 2008). After the decision-coaching session, the decision coach listened to the audio recording of the session twice to identify supporting quotes for the DSAT-10.

At the end of the session, the patient was also asked to provide qualitative feedback to determine his subjective experience of the decision coaching. The decision coach used open-ended questions such as, “what did you like most about the session” and “is there anything that could have improved your experience.” Open-ended questions allowed the patient to discuss his feelings and attitudes in more detail (Hashim, 2017). The audio transcript of this feedback was transcribed and analyzed through content analysis to identify important themes (Creswell, 2013).

Results

Patient Needs

At the initial patient encounter, Bill indicated that he was at a “very early stage” of making this decision and had no timeline for when he would like to make it. He stated that he preferred to be the one to ultimately make the decision, although his wife and physician were also involved. His baseline SURE test score was zero out of four, which indicated he was experiencing decisional conflict (see Table 1). He stated he needed help to know more about his options and to clarify which values mattered most to him. He was also unsure of the supports and resources that were available to him.

During the decision-coaching session, the decision coach and the patient navigated the PDA together. As revealed through the completion of the PDA’s values clarification exercise, reasons why Bill favoured the catheter ablation included that 1) he was not worried about the procedural risks; 2) he would prefer to avoid taking medications due to the infrequency of his symptoms; and 3) it would reduce the likelihood of him having to go to the emergency room if the vagal manoeuvres stopped working (see Figure 1). The reasons he listed for having an ablation were all rated four out of five. Reasons against having an ablation were that he 1) was not concerned with ablation being a definitive treatment to prevent his symptoms; 2) did not like the inconvenience of

Table 1

SURE Test Results of Decisional Conflict Before and After Decision Support

		Pre-Decision Support	Post-Decision Support
Sure of myself	Do you feel SURE about the best choice for you?	No	Yes*
Understand information	Do you know the benefits and risks of each option?	No	Yes
Risk-benefit ratio	Are you clear about which benefits and risks matter most to you?	No	Yes
Encouragement	Do you have enough support and advice to make a choice?	No	No
Total Score ¹		0 out of 4	3 out of 4

*“somewhat sure”

¹ Items are given a value of 1 point = ‘Yes’; 0 points = ‘No’. A score of less than or equal to 3 indicates decisional conflict

the procedure that would require him to take time off work; and 3) believed it might be unnecessary given his current symptom burden. The inconvenience and necessity of the procedure were rated five out of five, whereas the procedure's definitive treatment for SVT was rated four out of five.

After exploring his knowledge and values with the PDA during the decision-coaching session, the patient chose not to have a catheter ablation at that time. The patient completed a second SURE test and scored three out of four with outstanding needs for support and advice. He stated he was currently feeling sure, although he noted that he was not 100% sure, given that the frequency and intensity of his symptoms could change at any time. The patient stated he had a better understanding of the ablation and the risks and benefits, including which ones mattered most to him; however, he stated, "I need more time to evaluate the burden of the symptoms." To address his remaining decisional needs, the decision coach and the patient reviewed possible next steps. The patient identified that he needed to discuss this decision again with his wife, as well as his physician at his next appointment. The patient stated he felt comfortable with this decision and did not require additional support.

Evaluation of the Intervention

The DSAT-10 score was 10 out of 10, indicating high quality decision support. Bill's responses to the open-ended questions were overall positive, stating that the decision-coaching session was "very helpful" and made it "easier to express his ideas and concerns" when participating in the decision-making process with the decision coach.

Discussion

The aim of this case study was to evaluate the use of a decision support strategy regarding treatment options for a patient with SVT. This goal was accomplished as we demonstrated that decision coaching, combined with a condition-specific PDA, was effective in supporting a patient considering whether or not to have a catheter ablation for SVT treatment. Following the decision support intervention, the patient had reduced decisional conflict, as evidenced by his SURE test results, and was able to articulate his remaining decisional need to discuss this decision again with his wife and physician. Analyzing the decision-coaching session using the DSAT-10 revealed high quality decision support, which was corroborated by the patient's feedback.

Implications for Cardiovascular Nursing Practice

This case study has important implications for cardiovascular nurses in the areas of clinical practice, education, and research. In clinical practice, a challenge regarding SVT treatment is that it can be nuanced due to various types of SVT arrhythmias and therapy options, thus requiring expert knowledge for diagnosis and management (Page et al., 2016). Decision coaching and PDAs were designed to complement healthcare providers' counselling with the patients (Stacey

et al., 2017). In some instances, symptoms may not be fully investigated and patient preferences may be overlooked. As a result, patients are not offered opportunities to engage in shared decision-making with their clinicians (Yetkin, 2018). The use of shared decision-making interventions, as used in this case study, may be facilitated in clinical practice by targeting healthcare providers and nurses, in particular, as the driving force for these interventions (Légaré et al., 2018).

Treatment and management for SVT can be enhanced by shared decision-making in which patients select treatment options based on their values, preferences, and other comorbidities (Page et al., 2016). Shared decision-making can be a beneficial approach as people with SVT experience symptoms differently and may value attributes and outcomes of the various treatment options differently than others (Page et al., 2016). Decision coaching sessions, such as the one presented in this case study, offer a promising approach for cardiovascular nurses to engage patients in decision-making (Jull et al., 2021; Olling et al., 2021). Decision coaching can ensure that patients have the appropriate knowledge to make quality decisions, based on the best evidence and what is most important to them (Rahn et al., 2021).

Educating and training cardiovascular nurses about decision support is also important. The freely accessible Ottawa Decision Support Tutorial can equip nurses with the knowledge and skills required to integrate decision support in their clinical practice, to reduce decisional conflict, and improve patient satisfaction when participating in shared decision making. Further, the SURE test, a reliable and simple strategy that nurses can use in clinical practice, can help screen for decisional conflict and improve how people are supported in decision-making (Légaré et al., 2010).

Our findings also have implications for cardiovascular nursing research. While there are guidelines available regarding the diagnosis and management of SVT, there is a paucity of evidence related to educating and counselling patients on the various treatment options. Withers et al. (2015) discovered patients with cardiac arrhythmias often felt isolated as they believed their illness was misunderstood and lacked support. Others have found that shared decision-making can be challenging in patients with arrhythmias due to uncertainty of treatment outcomes and evolving patient values throughout their condition (Chung et al., 2021). To our knowledge, there are no evaluation studies of decision support interventions for patients with SVTs. Moreover, although the decision coach and the patient both agreed that the tools used were easy to use and understand, patients with varying levels of health literacy, as well as vulnerable populations may engage with these interventions differently (Durand et al., 2014; Muscat et al., 2021). Therefore, there is a need for further research, including longitudinal studies regarding the effects of decision coaching, as well as the decision aids used, on patient outcomes. Finally, the feasibility of implementing decision coaching and PDAs in cardiovascular nursing practice must also be explored.

Limitations

An important limitation of this case study was that it was a single case from one cardiac institution; therefore, we cannot say with certainty that the results are representative of this patient population. In addition, longer-term follow-up, which would have provided insight into long-term outcomes of the intervention, was not a part of this case study. Nevertheless, the findings offer valuable insights into a patient-centred approach to care for individuals with SVT considering their treatment options.

Conclusion

Patients diagnosed with SVT may experience decisional conflict when considering various treatment options. In this case study, the decision coach, a nurse graduate student with cardiovascular expertise, provided effective decision support using decision coaching and a PDA. This approach resolved the patient's decisional conflict and promoted an informed,

values-based decision. In SVT management and beyond, cardiovascular nurses are well positioned to advocate for shared decision-making approaches in clinical practice. As well, with decision support training, nurses are ideally situated to provide effective decision support interventions to optimize patient-centred care and decision outcomes.

Key Highlights:

- People with persistent SVT may experience decisional conflict when making decisions about their treatment options.
- In this case study, decision coaching improved patient perceived knowledge and satisfaction in the decision-making process regarding SVT ablation.
- Decision coaching combined with a decision aid has the potential to reduce decisional conflict and promote informed, values-based decisions.

REFERENCES

- Brugada, J., Katritsis, D. G., Arbelo, E., Arribas, F., Bax, J. J., Blomström-Lundqvist, C., Calkins, H., Corrado, D., Deffereos, S. G., Diller, G.-P., Gomez-Doblas, J. J., Gorenek, B., Grace, A., Ho, S. Y., Kaski, J.-C., Kuck, K.-H., Lambiase, P. D., Sacher, F., Sarquella-Brugada, G., ... Zaza, A. (2020). 2019 ESC Guidelines for the management of patients with supraventricular tachycardia: The Task Force for the management of patients with supraventricular tachycardia of the European Society of Cardiology (ESC): Developed in collaboration with the Association for European Paediatric and Congenital Cardiology (AEPC). *European Heart Journal*, 41(5), 655–720. <https://doi.org/10.1093/eurheartj/ehz467>
- Chung, M. K., Fagerlin, A., Wang, P. J., Ajayi, T. B., Allen, L. A., Baykaner, T., Benjamin, E. J., Branda, M., Cavanaugh, K. L., Chen, L. Y., Crossley, G. H., Delaney, R. K., Eckhardt, L. L., Grady, K. L., Hargraves, I. G., True Hills, M., Kalscheur, M. M., Kramer, D. B., Kunneman, M., Lampert, R., Wright, J. M. (2021). Shared decision making in cardiac electrophysiology procedures and arrhythmia management. *Circulation: Arrhythmia and Electrophysiology*, 14(12), e007958–e007958. <https://doi.org/10.1161/CIRCEP.121.007958>
- Creswell, J. W. (2013). *Qualitative inquiry and research design* (3rd ed.). SAGE Publications.
- Durand, M.-A., Carpenter, L., Dolan, H., Bravo, P., Mann, M., Bunn, F., & Elwyn, G. (2014). Do interventions designed to support shared decision-making reduce health inequalities? A systematic review and meta-analysis. *Public Library of Science One*, 9(4), e94670–e94670. <https://doi.org/10.1371/journal.pone.0094670>
- Ferron Parayre, A., Labrecque, M., Rousseau, M., Turcotte, S., & Légaré, F. (2013). Validation of SURE, a four-item clinical checklist for detecting decisional conflict in patients. *Medical Decision Making*, 34(1), 54–62. <https://doi.org/10.1177/0272989X13491463>
- Hashim, M. (2017). Patient-centered communication: Basic skills. *American Family Physician*, 95(1), 29–34. <http://search.proquest.com/docview/1857751637>
- Healthwise. (2019). *Supraventricular tachycardia: Should I have catheter ablation?* <https://decisionaid.ohri.ca/AZsumm.php?ID=1564>
- Helton, M. R. (2015). Diagnosis and management of common types of supraventricular tachycardia. *American Family Physician*, 92(9), 793–800B.
- Hoefel, L., O'Connor, A., Lewis, K. B., Boland, L., Sikora, L., Hu, J., & Stacey, D. (2020). 20th anniversary update of the Ottawa Decision Support Framework Part 1: A systematic review of the decisional needs of people making health or social decisions. *Medical Decision Making*, 40(5), 555–581. <https://doi.org/10.1177/0272989X20936209>
- Joseph-Williams, N., Newcombe, R., Politi, M., Durand, M.-A., Sivell, S., Stacey, D., O'Connor, A., Volk, R. J., Edwards, A., Bennett, C., Pignone, M., Thomson, R., & Elwyn, G. (2014). Toward minimum standards for certifying patient decision aids: A modified Delphi consensus process. *Medical Decision Making*, 34(6), 699–710. <https://doi.org/10.1177/0272989X13501721>
- Jull, J., Köpke, S., Smith, M., Carley, M., Finderup, J., Rahn, A. C., Boland, L., Dunn, S., Dwyer, A. A., Kasper, J., Kienlin, S. M., Légaré, F., Lewis, K. B., Lyddiatt, A., Rutherford, C., Zhao, J., Rader, T., Graham, I. D., & Stacey, D. (2021). Decision coaching for people making healthcare decisions. *The Cochrane Database of Systematic Reviews*, 11(11), CD013385. <https://doi.org/10.1002/14651858.CD013385.pub2>
- Katritsis, A., Zografos, T., Katritsis, G., Giazitzoglou, E., Vachliotis, V., Paxinos, G., Camm, A., & Josephson, M. (2017). Catheter ablation versus antiarrhythmic drug therapy in patients with symptomatic atrioventricular nodal re-entrant tachycardia: A randomized, controlled trial. *Europace*, 19(4), 602–606. <https://doi.org/10.1093/europace/euw064>
- Légaré, F., Kearing, S., Clay, K., Gagnon, S., D'Amours, D., Rousseau, M., & O'Connor, A. M. (2010). Are you SURE?: Assessing patient decisional conflict with a 4-item screening test. *Canadian Family Physician*, 56(8), e308–e314. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920798/>
- Légaré, F., Adekpedjou, R., Stacey, D., Turcotte, S., Kryworuchko, J., Graham, I. D., Lyddiatt, A., Politi, M. C., Thomson, R., Elwyn, G., & Donner-Banzhoff, N. (2018). Interventions for increasing the use of shared decision making by healthcare professionals. *The Cochrane Database of Systematic Reviews*, 7(7), CD006732. <https://doi.org/10.1002/14651858.CD006732.pub4>
- Lewis, K. B., Starzomski, R., & Young, L. (2014). A relational approach to implantable cardioverter-defibrillator generator replacement: An integrative review of the role of nursing in shared decision-making. *Canadian Journal of Cardiovascular Nursing*, 24(3), 6–14.

- Muscat, D., Smith, J., Mac, O., Cadet, T., Giguere, A., Housten, A. J., Langford, A. T., Smith, S. K., Durand, M.-A., & McCaffery, K. (2021). Addressing health literacy in patient decision aids: An update from the International Patient Decision Aid Standards. *Medical Decision Making, 41*(7), 848–869. <https://doi.org/10.1177/0272989X211011101>
- Nordblom, A.-K., Boysen, G. N., Berglund, M., & Kjellssdotter, A. (2022). Health care centre and emergency department utilization by patients with episodes of tachycardia. *BioMed Central Cardiovascular Disorders, 124*. <https://doi.org/10.1186/s12872-022-02568-y>
- O'Connor, A. M. (2006). *Ottawa Decision Support Framework to address decisional conflict*. <https://decisionaid.ohri.ca/docs/develop/ODSF.pdf>
- O'Connor, A. M., Stacey, D., & Boland, L. (2015). *Ottawa Decision Support Tutorial*. <https://decisionaid.ohri.ca/ODST>
- Olling, K., Steffensen, K. D., Berry, L., & Stacey, D. (2021). The invisible roles of oncology nurses in shared decision making. *Cancer Care Research Online, 1*(2), e0007. <https://doi.org/10.1097/CR9.0000000000000007>
- Page, R., Joglar, J., Caldwell, M., Calkins, H., Conti, J., Deal, B., Estes, M., Field, M., Goldberger, Z., Hammill, S., Indik, J., Lindsay B., Olshansky, B., Russo, A., Shen, W., Tracy, C., & Al-Khatib, S. (2016). 2015 ACC/AHA/HRS guideline for the management of adult patients with supraventricular tachycardia. *Journal of the American College of Cardiology, 67*(13), e27–e115. <https://doi.org/10.1016/j.jacc.2015.08.856>
- Rahn, A. C., Jull, J., Boland, L., FINDERUP, J., Loiselle, M.-C., Smith, M., Köpke, S., & Stacey, D. (2021). Guidance and/or decision coaching with patient decision aids: Scoping reviews to inform the International Patient Decision Aid Standards (IPDAS). *Medical Decision Making, 41*(7), 938–953. <https://doi.org/10.1177/0272989X21997330>
- Sohinki, D., & Obel, O. (2014). Current trends in supraventricular tachycardia management. *The Ochsner Journal, 14*(4), 586–595. PubMed Central. <https://www.ncbi.nlm.nih.gov/pmc/>
- Stacey, D., Légaré, F., Boland, L., Lewis, K. B., Loiselle, M.-C., Hoefel, L., Garvelink, M., & O'Connor, A. M. (2020). 20th anniversary Ottawa decision support framework part 3: Overview of systematic reviews and updated framework. *Medical Decision Making, 40*(3), 379–398. <https://doi.org/10.1177/0272989X20911870>
- Stacey, D., Légaré, F., Lewis, K. B., Barry, M. J., Bennet, C. L., Eden, K. B., Holmes-Rovner, M., Llewellyn-Thomas, H., Lyddiatt, A., Thomson, R., & Trevena, L. (2017). Decision aids for people facing health treatment or screening decisions. *Cochrane Database of Systematic Reviews, 4*. <https://doi.org/10.1002/14651858.CD001431.pub5>
- Stacey, D., Taljaard, M., Drake, E., & O'Connor, A. M. (2008). Audit and feedback using the brief Decision Support Analysis Tool (DSAT-10) to evaluate nurse-standardized patient encounters. *Patient Education and Counseling, 73*(3), 519–525. <https://doi.org/10.1016/j.pec.2008.07.016>
- Stacey, D., Taljaard, M., Drake, E. R., & O'Connor, A. M. (2015). *User manual – 10-item decision support analysis tool (DSAT-10)*. https://decisionaid.ohri.ca/eval_dsat.html
- University of Ottawa Heart Institute. (2022). *Annual report 2021-22*. <https://www.annualreport.ottawaheart.ca/>
- Withers, K. L., Wood, K. A., Carolan-Rees, G., Patrick, H., Lencioni, M., & Griffith, M. (2015). Living on a knife edge – the daily struggle of coping with symptomatic cardiac arrhythmias. *Health and Quality of Life Outcomes, 13*(1), 86–86. <https://doi.org/10.1186/s12955-015-0282-9>
- Yetkin, E. (2018). Diagnostic challenges in supraventricular tachycardia: Anticipating value of natriuretic peptides. *Cardiovascular Endocrinology & Metabolism, 7*(2), 34–36. <https://doi.org/10.1097/XCE.0000000000000148>
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. SAGE Publications.

A Quality Improvement Project to Determine the Knowledge, Attitudes, and Beliefs of Healthcare Providers Regarding the Treatment of Patients with Obesity

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Abstract

Clinical obesity is now understood to be a chronic, relapsing disease, requiring multi-system management. As a quality improvement project, we conducted a survey of healthcare providers (N = 255) to determine their obesity-related knowledge, attitudes, beliefs, and perceptions of opportunity for interventions. Overeating, stress, and physical inactivity were the most frequently reported factors causing obesity. Further, more than 60% of respondents indicated ambiguity toward working with patients living with obesity and more than 35% felt ill-prepared to discuss weight with their patients. More than 90% agreed that additional

training, education materials, and protocols would be useful in supporting obese patients in a cardiac context. These findings have informed the development of a comprehensive institutional program that supports the changing narrative of obesity and integration of the 2020 Canadian Adult Obesity Clinical Practice Guidelines into clinical practice in our tertiary care setting.

Keywords: obesity management, healthcare providers, attitudes, beliefs, intervention opportunity, best practice

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Background

Obesity is a chronic disease associated with physical and psychological consequences (Wharton et al., 2020). Using the body mass index (BMI) classification of obesity, the 2018 Canadian Community Health Survey reported that 26.8% of Canadian adults were living with obesity (Statistics Canada, 2019). Individuals with obesity are at higher risk of several physical diseases, including cardiovascular disease (Yeh et al., 2019). Casual factors driving adiposity include biological, physiological, psychological, environmental, and social inequalities (Wharton et al., 2020). These factors alter adipose tissue and impact cardiovascular health (Koenen et al., 2021). Moreover, obesity stigmatization is reportedly associated with adverse mental health and psychosocial outcomes (Barnes et al., 2014; Haynes et al., 2019). For example, weight-related stigmatization can increase an individual's vulnerability to depression, isolation, or economic hardship, and may affect the physiological mechanisms that, in turn, promote habits of overeating and sedentary lifestyles (Tapping et al., 2020; Vadiveloo & Mattei, 2017).

The Canadian Association of Bariatric Physicians and

Surgeons (CABPS) and Obesity Canada (OC) have developed clinical practice guidelines (Wharton et al., 2020), which update the definition, framework, and treatment recommendations for healthcare providers (HCPs) working with patients living with obesity. In these Canadian Adult Obesity Clinical Practice Guidelines (CAOCPG; Wharton et al., 2020), obesity is defined as a chronic disease, characterized by abnormal or excess body fat (i.e., adipose tissue) accumulation that impairs health, increasing the risk of long-term complications and premature mortality. Changes in recommended standards of care under the new guidelines include shifting the focus toward improving patient-centred health outcomes, rather than weight loss alone, as well as understanding weight bias and stigma, its impact on morbidity and mortality, and the complex nature of obesity management (Wharton et al., 2020).

Numerous studies have suggested that HCPs feel ill equipped to support people living with obesity (Bocquier et al., 2005; Foster et al., 2003; Turner et al., 2018). For example, Bocquier et al. (2005) found that most general practitioners (79%) believed their role in obesity management was important, but 58% felt they did not perform it

effectively. According to the recent Canadian obesity guidelines (Wharton et al., 2020), barriers to providing effective management for obesity include a lack of 1) knowledge regarding emerging evidence of obesity as a disease process, 2) education materials and practical training for HCPs, and 3) individualized interdisciplinary treatment facilities.

Additionally, biases regarding weight and body size negatively impact the level and quality of healthcare received by patients with larger bodies (Cohen & Shikora, 2020; Obesity Canada-Obésité Canada, 2019; Wynn et al., 2018). In a qualitative study, Bornhoeft (2018) reported that HCPs held patients responsible for their weight status, as they see patients being largely at fault for their weight gain and having minimal intent to adapt healthier lifestyles. Moreover, Bornhoeft concluded that HCPs perceived their own efforts as futile, viewing patients as unmotivated and noncompliant to weight loss regimes, thus reducing their desire to support obesity care. These negative perceptions result in less time spent with patients during medical appointments, fewer referrals to specialists or treatments, and lack of properly sized equipment (e.g., gowns, exam tables, beds; Kirk et al., 2020). As a result, patients may delay or avoid medical care for fear of receiving unsolicited or inappropriate advice to lose weight, and disrespectful interactions with HCPs (Kirk et al., 2020).

Nurses, and nursing leadership in particular, are pivotal in the integration of best practice guidelines into clinical practice (Registered Nurses' Association of Ontario [RNAO], 2013). Evidenced-based leadership, using a transformational practice approach, creates a sustained healthy work environment that supports best practices for improving patient

outcomes (RNAO, 2013). Accordingly, the Vice President of Nursing, Quality, Risk, and Health Information of our tertiary cardiac care institution identified the 2020 CAOCPG, including their potential impact on professional practices, healthy work environments, and patient outcomes, as key performance indicators for the institution and initiated an implementation mandate.

To this end, the primary aim of our quality improvement (QI) project was to determine HCPs' knowledge, attitudes, beliefs, and perception of opportunity for intervention for patients with obesity, with the goal to inform the educational needs of our HCPs. A secondary objective was to identify discrepancies between current practices and those of the CAOCPG. The third objective was to determine if a comprehensive program to support HCPs in obesity-related care was required.

Methods

An environmental scan was conducted using an existing questionnaire (Bucher Della Torre et al., 2018). We obtained permission from the authors to use the questionnaire and to make changes to the questionnaire to align with our institutional needs. The quality project summary was reviewed by the Research Ethics Board (REB) of the Ottawa Health Science Network and approved as a quality initiative and QI project, as defined in the Tri-Council Policy Statement 2, Article 2.5. As this was a QI project, formal ethics review and approval were not required; however, the REB provided approval for the project, including publication of the questionnaire results.

Table 1

Mean (± SD) Score of the Total Responses for Each Section of the Questionnaire

Questionnaire section	Rating scale		Mean score (± SD)
	Point-scale	Definition	
Beliefs – about obesity	5-point	1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree	4.69 (±0.58)
Beliefs – causes of obesity	5-point	1-not at all important, 2-low importance, 3-moderately important, 4-very important, 5-extremely important	3.75 (±0.98)
Attitudes	5-point	1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree	2.75 (±1.06)
Opportunity	5-point	1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree	3.20 (±0.99)
Practices	4-point	1-no, 2-I don't know, 3-just a few of, 4-yes	1.93 (±1.38)
Perceived needs – skillset	5-point	1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree	2.88 (±1.11)
Perceived needs – useful tools	4-point	1-not at all useful, 2-not useful, 3-useful, 4-very useful	3.34 (±0.65)

Note. SD = standard deviation.

Sample and Setting

A total of 600 HCPs from our institution, including 400 nurses, 135 physicians, and 65 allied health and clerical staff, were invited to participate, of which 255 completed the questionnaire. Our large tertiary care cardiac institution in eastern Canada typically provides care for almost 6,000 inpatients, and more than 270,000 outpatient visits annually.

Instrumentation

A multidisciplinary committee was established to select a questionnaire that would achieve our project objectives. The committee chose the Bucher Della Torre et al. (2018) questionnaire due to the similarities between their objectives and academic setting and the current QI project. The 40-item questionnaire is divided into four sections: (i) professional and personal characteristics, including coursework related to obesity (e.g., After your graduation, have you followed training on obesity?); (ii) knowledge of current recommendations regarding obesity and treatment goals (e.g., Regarding causes of obesity, what is the importance of the following factors?); (iii) attitudes towards obesity and patients living with obesity (e.g., In your opinion, people with obesity are in general lazy.); and (iv) reported practices (e.g., I feel uncomfortable when I have to examine or take care of a patient with obesity.).

Demographic data and professional characteristics were collected using ratio and nominal scales. Participants rated the statements based on nominal and ordinal scales. Similar to the Bucher Della Torre et al. (2018) study, our project required respondents to be working HCPs at our university hospital. However, since our hospital specializes in care for adult cardiac patients, questions structured around childhood obesity were omitted. We also removed questions pertaining to calculating or using BMI and caloric intake as the new guidelines move away from this as the focus of obesity management (See Table S1 – revised questionnaire).

Project Procedures

In March 2021, an email was sent to all HCPs (N = 600) at our institution, providing the context of the project, a link to the electronic questionnaire, and a confidentiality statement regarding the absence of personal identifying information being collected. Additionally, HCPs were informed that data would be stored using a password-protected electronic format. Email reminders were sent three weeks after the initial launch.

The team used the SurveyMonkey® platform to deliver the questionnaire. Analysis and visual representation of data also came from SurveyMonkey.® The team collected the data from the analysis tool two weeks after the final email reminder was sent out.

Data Analysis

The team reviewed and scored each section of the questionnaire. Mean scale scores were computed of all

Table S1

Questionnaire

Beliefs about the disease and causes:
(1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree)

Obesity is a health problem.
Obesity leads to serious medical complications.

Regarding causes of obesity, what is the importance of the following factors:
(1-not at all important, 2-low importance, 3-moderately important, 4-very important, 5-extremely important)

Genetic factors
Endocrinological disorders²
Lack of physical activity
Excess food intake
Lack of willpower
Psychological problems
Advertising and marketing
Screen time (TV, computer, etc.)
Stress
Type of beverage intake³

Attitudes⁴:
(1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree)

In your opinion, people with obesity are in general...awkward.
In your opinion, people with obesity are in general... lazy.
In your opinion, people with obesity are in general... neglected.
I can easily understand the difficulties of patients with obesity.
I like working with patients with obesity.
I feel uncomfortable when I have to examine or take care of a patient with obesity.
I have difficulty to feel empathic with patients with obesity.
In work setting, I would prefer that my patients wouldn't be obese.
I feel disgust regarding patients with obesity.

Opportunity:
(1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree)

Time of a hospitalization is ideal to discuss with the patient of his/her weight problem.
At the time of an ambulatory consultation, for another problem than obesity, it is appropriate to discuss this problem.
Every visit in this hospital is an opportunity to discuss weight problem with a patient⁵.
I'm afraid to make my patient feel guilty if I discuss his/her obesity.
It is easier for me to help a patient stop smoking than to help him/her to lose weight.
I have as much difficulty to discuss obesity as to discuss sexuality with a patient.
I feel comfortable to discuss with a patient his/her obesity⁶.

Practices⁷:
(1-no, 2-I don't know, 3-just a few of, 4-yes)

I have documentation tools at my disposal (brochures, flyers, etc.).
I use specific intervention tools such as food diaries, decision balance, etc.
I give information to patients regarding their obesity.
Therapeutic education of patients with obesity is part of my daily routine.
Health promotion is a priority in my department.

Perceived needs for acquiring a specific skillset:
(1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree)

Taking care of patients with obesity requires specific training.
I feel trained enough to intervene with patients with obesity.
I know how to screen for eating disorders.

Perceived needs regarding tools that would be useful:
(1-not at all useful, 2-not useful, 3-useful, 4-very useful)

Would the following be useful to take care of a patient with obesity:
educational material?
Would the following material be useful to take care of a patient with obesity:
training on obesity?
Would the following material be useful to take care of a patient with obesity:
protocols to deal with patients with obesity?
Would the following material be useful to take care of a patient with obesity:
list of professionals for referrals?

Internal consistency reported by Bucher Della Torre et al. (2018):
¹Questions 10–11 Belief about illness (a = 0.82); ²Questions 11–12 Genetic and endocrinological causes (a = 0.75); ³Questions 12–19 Other causes (a = 0.69); ⁴Questions 20–28 Attitudes (a = 0.79); ⁵Questions 29–31 Moment of opportunity (a = 0.76); ⁶Questions 32–25 Barriers to intervene (a = 0.80); Questions 36–40 Practices (a = 0.74)

demographic and background knowledge data. Consistent with the analysis of the original questionnaire (Bucher Della Torre et al., 2018), for the knowledge score, we divided the number of correct answers by the total number of knowledge questions; mean scores were calculated for attitudes and beliefs.

Findings

Sample Characteristics

Demographic characteristics for the sample ($N = 255$) are presented in Table 2. The response rate was 42.5% from the total of 600 HCPs invited to participate, including 400 nurses, 135 physicians and 65 allied health/clerks. Respondents identified themselves as nurses ($n = 131$), physicians

($n = 10$), and allied health professionals ($n = 36$). The response rate was proportionately highest among the allied health professionals (55%), followed by nurses (33%), and physicians (10%). Most respondents self-identified as female ($n = 218$). Approximately half of the respondents ($n = 132$) had worked at our institution for more than 10 years. The majority of the sample (92.1%) was fairly distributed across ages under 60 years of age, with only 7.9% of the respondents reportedly older than 60-years-old.

Most respondents reported that they had no specific undergraduate ($n = 204$, 81.9%) or graduate ($n = 206$, 83.1%) training related to obesity. Of the individuals who reportedly received graduate level training ($n = 42$), only 4.8% attended a long training session (i.e., > 1 week), while the majority (45.2%) participated in short training sessions (i.e., < 1 week) or courses that touched on the topic of obesity (50%).

Table 2

Demographic Characteristics of Respondents

Demographic characteristic	Sample	
	n	%
Sex/Gender		
Male	36	14.1
Female	218	85.5
Two-Spirit, Trans, and Other	1	0.4
Profession		
Nurse	131	51.4
Physician	10	3.9
Allied Health	36	14.1
Clerk	21	8.2
Other ¹	57	22.4
Age		
≤ 30 years	48	18.8
31–40 years	60	23.5
41–50 years	65	25.5
51–60 years	62	24.3
> 60 years	20	7.9
Time working at the institution		
≤ 2 years	36	14.1
2–4 years	41	16.1
5–9 years	46	18.0
> 10 years	132	51.8

Note. ¹Other was not defined but can include all other roles within institution.

Beliefs about Obesity and Its Causes

Most respondents (74.3%) recognized that obesity is a health problem and that it can lead to serious medical complications (96.6%). When provided with a list of causal factors for obesity (see Table 3), and asked to rank each cause using a Likert Scale from ‘not at all important to extremely important’, respondents selected excess food intake (79.8%), stress (78.8%), and lack of physical activity (72.1%) as the top three (i.e., very or extremely important) causes of obesity. Using the same scoring categories, advertising and marketing (46.1%) and lack of willpower (37.1%) were ranked as the lowest causes of obesity.

Attitudes and Biases

General beliefs of respondents about individuals living with obesity are shown in Table 4. Overall, most respondents did not agree with negative stereotypes typically associated with individuals living with obesity, such as being awkward or lazy. Almost half of the respondents (46%) agreed or strongly agreed that people with obesity are neglected. Although the majority of respondents believed they could understand the difficulties of patients living with obesity (61.1%), only 22% reported that they like working with patients with obesity.

Opportunity to Discuss Obesity Management

To better understand HCPs’ understanding of the most optimal time to discuss management of obesity, respondents were asked about inpatient and ambulatory care timed interventions. Using a Likert scale of ‘strongly agree to strongly disagree’, more than 50% of respondents strongly agreed that every visit to the institution, whether hospital admission or through ambulatory consultation, was an opportunity to discuss the patient’s weight. However, using the same scale, 44% of respondents reported a fear of making patients feel guilty by addressing obesity, 32.4% were ambivalent, and only 22% of respondents were not afraid of making patients feel guilty.

Table 3*Respondents' Rating of Proposed Causes of Obesity*

Causes of obesity	Not at all important/ low importance		Moderately important		Very important/extremely important	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Genetic factors	16	7.0	70	30.8	141	62.1
Endocrinological disorders	7	3.1	56	24.6	165	72.3
Lack of physical activity	16	6.8	49	21.0	168	72.1
Excess food intake	10	4.3	37	15.9	186	79.8
Lack of willpower	71	30.5	75	32.3	86	37.0
Psychological problems	21	9.0	49	21.1	162	69.8
Advertising and marketing	44	19.0	81	34.9	107	46.2
Screen time (TV, computer, etc.)	35	15.2	71	30.9	124	53.9
Stress	5	2.2	44	19.1	182	78.8

Table 4*Respondent Answers to Opinion Statements re General Obesity-Related Beliefs*

Opinion statements	Strongly disagree/disagree		Neither agree nor disagree		Agree/strongly agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Obesity is a health problem	4	1.7	7	3.0	222	95.3
Obesity leads to serious medical complications	1	0.4	7	3.0	225	96.6
In your opinion, people with obesity are in general...						
Awkward	139	61.5	69	30.5	18	7.9
Lazy	149	65.9	58	25.7	19	8.4
Neglected	52	22.9	71	31.3	104	45.9

Current Obesity Management Practice and Perceived Needs

Respondents provided their responses regarding their current practices with patients living with obesity, as well as their perceived needs to better care for this population. More than 72% of respondents indicated they did not practice therapeutic education, as part of their work with patients living with obesity, despite 64.9% of respondents reporting that health promotion is a priority in their department. Intervention tools, such as food diaries were not being used by most respondents (80%). Many respondents (64.9%) reported that information was not currently being provided to patients regarding obesity management. Less than 2.5% of participants felt sufficiently trained to support people with obesity. Moreover, 69.2% strongly agreed or agreed that supporting patients with obesity required specific training. Finally, most respondents strongly agreed that the following

would be useful in clinical practice to better support patients with obesity: education material (89.6%), training on obesity (93.6%), protocols/policies (91.6%), and professionals referral resources (96%).

Discussion

The current QI project explored the beliefs, attitudes, opportunities, practice, and perceived needs of HCPs working with patients living with obesity. Our data suggests several factors that may impact patient care for those living with obesity. First, respondents reported a bias towards prioritizing a patient's lifestyle choices, such as lack of physical activity and excess food intake, as the cause of obesity. As a result, they may only focus on a simple weight loss message of 'eat less, move more' as the solution, which, as evidence suggests, is likely to fail (Tylka et al., 2014). Research evidence supports the importance of HCPs receiving obesity

health education to reduce complications related to obesity (Sharma & Kushner, 2009). Indeed, our findings suggest that HCPs require additional educational materials and training regarding obesity management.

Second, the findings suggest that there are discrepancies between our institution's current practices and those recommended by the 2020 CAOCPG. Our results indicate that current treatment for patients with obesity is inconsistent with the guidelines, as HCPs lack protocols and resources to facilitate patient-provider best practice interactions and engagement. This outlines the need for our institution to develop clinical pathways that align with the 2020 CAOCPG, as part of a comprehensive institutional education program.

Third, despite acknowledging their crucial role in supporting obesity management, more than 60% of HCPs indicated ambiguity toward working with patients with obesity. Considerable evidence suggests that weight stigma is consequential for patient-provider interactions and the standard of care received by patients living with obesity (Phelan et al., 2015; Puhl et al., 2021). Patients with higher internalized weight bias experience greater healthcare avoidance, perceived weight judgment from HCPs, and infrequent appointments to obtain routine checkups, thus negatively impacting their healthcare behaviours and experiences (Puhl et al., 2021). The ambiguity reported in our project may, in part, be resolved by obesity education and institutional protocols that collectively support best practices for patients living with obesity.

Our QI project had several limitations. In searching for an appropriate tool, we narrowed the scope to only include publications with questionnaires evaluating the attitudes and beliefs of HCPs in university hospital settings. Additionally, the selection was restricted to tools that had been published in the English language, or that had developed English versions, which may have missed a more appropriate tool for the project. Third, the tool did not define or clarify terms used when asking respondents about beliefs and perceived needs, which may have led to confusion in responses (e.g., many neutral responses). Fourth, the data gathered may also have been hindered by the general nature of the questions and the wide framework of obesity, leading to many responses of 'neither agree nor disagree' (Frühbeck et al., 2019; Nutter et al., 2016; Stefánsdóttir, 2020). Fifth, despite the questionnaire being anonymous, social desirability may have had an impact on responses. Finally, although overall, the response rate was quite good, the response rate for physician respondents was very low (7.4%). Possible explanations for this include lack of time and/or overall questionnaire fatigue (Funkhouser et al., 2017), or do physicians not perceive obesity as a priority?

Implications for Clinical Practice

The findings from this QI project have several key implications for clinical practice. First, although HCPs do identify that multiple factors lead to obesity, they continue to focus on inactivity and excess food intake as the primary factors

causing obesity. Nursing-led staff interventions need to incorporate training and education regarding the pathogenesis of obesity that is based on the current evidence-based recommendations. Second, there are underlying gaps in our HCPs' current practice, mainly attributed to a lack of education and resources. Providing access to obesity-related education for HCPs, patient education resources, and clinical pathways of care to guide practice will further empower HCPs to provide best practice care to cardiac patients living with obesity.

Although the CAOCPG focus on primary healthcare, these guidelines can also be adapted at the institutional level. Nursing leadership is paramount to the success of best practice guideline integration. This may include nurse administrators, bedside staff, advanced practice nurses, and nurses working in the areas of policy, education, and research, as well as colleagues from a multidisciplinary team. Importantly, this QI project has informed the development of a comprehensive institutional program that supports the changing narrative of obesity and integration of the 2020 CAOCPG into clinical practice. By including the perspectives of our HCPs, this best practice project has the potential to impact quality patient outcomes, as well as organizational and system performance indicators.

Conclusion

The pathogenesis of obesity involves complex biological, physiological, psychological, environmental, and social influences that negatively affect physical and psychological health outcomes. Obesity Canada's 2019 Access to Treatment Report Card (Obesity Canada-Obésité Canada, 2019), that informed the development of the 2020 CAOCPG, concludes that Canadians living with obesity continue to be ignored by healthcare systems compared to those requiring support for other chronic conditions. Our findings support the importance of shifting the focus of obesity management toward improving patient-centred health outcomes, instead of weight loss alone, and the need for patients to have access to evidence-based interventions within healthcare systems. This quality initiative has provided the institution's leadership with an in depth understanding of their HCP's obesity-related knowledge, attitudes, beliefs, and perceptions of opportunity for interventions. Moreover, it has identified gaps in current practices of obesity management, advancing a comprehensive institutional program with patient-focused obesity management that will improve the institute's quality of healthcare provided. This is an opportunity for cardiovascular nursing leadership and HCPs within cardiac institutions to use a best practice approach toward obesity-related care to enhance health and clinical outcomes for our patients.

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Key Highlights

1. Recent Canadian obesity guidelines recommend shifting the focus towards improving patient-centred health outcomes, rather than weight loss alone.
2. HCPs in our tertiary cardiac care institution lack the education, training, resources, and systems support to provide best practice care.

3. There is an urgent need for cardiovascular nurses to integrate a best practice approach into clinical obesity care, thus, improving outcomes for cardiac patients.

REFERENCES

- Barnes, R. D., Ivezaj, V., & Grilo, C. M. (2014). An examination of weight bias among treatment-seeking obese patients with and without binge eating disorder. *Psychiatric-Medical Comorbidity*, 36(2), 177–180. <https://doi.org/10.1016/j.genhosppsy.2013.10.011>
- Bocquier, A., Verger, P., Basdevant, A., Andreotti, G., Baretge, J., Villani, P., & Paraponaris, A. (2005). Overweight and obesity: Knowledge, attitudes and practices of general practitioners in France. *Presse Medicale* 34(11), 769–775. [https://doi.org/10.1016/s0755-4982\(05\)84039-4](https://doi.org/10.1016/s0755-4982(05)84039-4)
- Bornhoeft, K. (2018). Perceptions, attitudes, and behaviors of primary care providers toward obesity management: A qualitative study. *Journal of Community Health Nursing*, 35(3), 85–101. <http://doi.org/10.1080/07370016.2018.1475792>
- Bucher Della Torre, S., Courvoisier, D. S., Saldarriaga, A., Martin, X. E., & Farpour-Lambert, N. J. (2018). Knowledge, attitudes, representations and declared practices of nurses and physicians about obesity in a university hospital: Training is essential. *Clinical Obesity*, 8(2), 122–130. <http://doi.org/10.1111/cob.12238>
- Cohen, R., & Shikora, S. (2020). Fighting weight bias and obesity stigma: A call for action. *Obesity Surgery*, 30(5), 1623–1624. <http://doi.org/10.1007/s11695-020-04525-0>
- Foster, G. D., Wadden, T. A., Makris, A. P., Davidson, D., Sanderson, R. S., Allison, D. B., & Kessler, A. (2003). Primary care physicians' attitudes about obesity and its treatment. *Obesity Research*, 11(10), 1168–1177. <http://doi.org/10.1038/oby.2003.161>
- Frühbeck, G., Busetto, L., Dicker, D., Yumuk, V., Goossens, G. H., Hebebrand, J., Halford, J. G. C., Farpour-Lambert, N. J., Blaak, E. E., Woodward, E., & Toplak, H. (2019). The ABCD of obesity: An EASO position statement on a diagnostic term with clinical and scientific implications. *Obesity Facts*, 12(2), 131–136. <http://doi.org/10.1159/000497124>
- Funkhouser, E., Vellala, K., Baltuck, C., Cacciato, R., Durand, E., McEdward, D., Sowell, E., Theisen, S. E., Gilbert, G. H., & National Dental PBRN Collaborative Group (2017). Survey methods to optimize response rate in the National Dental Practice-Based Research Network. *Evaluation & the Health Professions*, 40(3), 332–358. <https://doi.org/10.1177/0163278715625738>
- Haynes, A., Kersbergen, I., Sutin, A., Daly, M., & Robinson, E. (2019). Does perceived overweight increase risk of depressive symptoms and suicidality beyond objective weight status? A systematic review and meta-analysis. *Clinical Psychology Review*, 73, 101753. <http://doi.org/10.1016/j.cpr.2019.101753>
- Kirk, S. F., Salas, X. R., Alberga, A. S., Russell-Mayhew, S., & Salas, R. (2020). Canadian adult obesity clinical practice guidelines: Reducing weight bias in obesity management, practice and policy. *Obesity Canada-Obésité Canada*. <https://obesitycanada.ca/wp-content/uploads/2021/05/1-Reducing-weight-bias-v6-with-links-1-1.pdf>
- Koenen, M., Hill, M. A., Cohen, P., & Sowers, J. R. (2021). Obesity, adipose tissue and vascular dysfunction. *Circulation Research*, 128(7), 951–968. <https://doi.org/10.1161/circresaha.121.318093>
- Nutter, S., Russell-Mayhew, S., Alberga, A. S., Arthur, N., Kassan, A., Lund, D. E., Sesma-Vazquez, M., & Williams, E. (2016). Positioning of weight bias: Moving towards social justice. *Journal of Obesity*, 10. <http://doi.org/10.1155/2016/3753650>
- Obesity Canada-Obésité Canada. (2019). Report card on access to obesity treatment for adults in Canada 2019. <https://obesitycanada.ca/wp-content/uploads/2019/05/OC-Report-Card-2019-English-Final.pdf>
- Phelan, S. M., Burgess, D. J., Yeazel, M. W., Hellerstedt, W. L., Griffin, J. M., & van Ryn, M. (2015). Obesity treatment/outcomes impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obesity Reviews*, 16(4), 319–326. <http://doi.org/10.1111/obr.12266>
- Puhl, R. M., Lessard, L. M., Himmelstein, M. S., & Foster, G. D. (2021). The roles of experienced and internalized weight stigma in health-care experiences: Perspectives of adults engaged in weight management across six countries. *PLoS One*, 16(6), e0251566. <http://doi.org/10.1371/journal.pone.0251566>
- Registered Nurses' Association of Ontario (RNAO). (2013). Healthy work place environment guidelines. <https://rnao.ca/bpg/guidelines/developing-and-sustaining-nursing-leadership>
- Sharma, A. M., & Kushner, R. F. (2009). A proposed clinical staging system for obesity. *International Journal of Obesity*, 33(3), 289–295. <https://doi.org/10.1038/ijo.2009.2>
- Statistics Canada. (2019). *Overweight and obese adults*, 2018. <https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00005-eng.pdf>
- Stefánsdóttir, Á. (2020). Three positions on the fat body: Evaluating the ethical shortcomings of the obesity discourse. *Clinical Ethics*, 15(1), 39–48. <http://doi.org/10.1177/1477750920903455>
- Tapking, C., Benner, L., Hackbusch, M., Schüler, S., Tran, D., Ottawa, G. B., Krug, K., Müller-Stich, B. P., Fischer, L., & Nickel, F. (2020). Influence of body mass index and gender on stigmatization of obesity. *Obesity Surgery*, 30(12), 4926–4934. <http://doi.org/10.1007/s11695-020-04895-5>
- Turner, M., Jannah, N., Kahan, S., Gallagher, C., & Dietz, W. (2018). Current knowledge of obesity treatment guidelines by health care professionals. *Obesity*, 26(4), 665–671. <http://doi.org/10.1002/oby.22142>
- Tylka, T. L., Annunziato, R. A., Burgard, D., Danielsdóttir, S., Shuman, E., Davis, C., & Calogero, R. M. (2014). The weight-inclusive versus weight-normative approach to health: Evaluating the evidence for prioritizing well-being over weight loss. *Journal of Obesity*, 983495. <http://doi.org/10.1155/2014/983495>
- Vadiveloo, M., & Mattei, J. (2017). Perceived weight discrimination and 10-year risk of allostatic load among US adults. *Annals of Behavioral Medicine*, 51(1), 94–104. <http://doi.org/10.1007/s12160-016-9831-7>
- Wharton, S., Lau, D. C. W., Vallis, M., Sharma, A. M., Biertho, L., Campbell-Scherer, D., Adamo, K., Alberga, A., Bell, R., Boulé, N., Boyling, E., Brown, J., Calam, B., Clarke, C., Crowshoe, L., Divalentino, D., Forhan, M., Freedhoff, Y., Gagner, M., Glazer, S., ... Wicklum, S. (2020). Obesity in adults: A clinical practice guideline. *Canadian Medical Association Journal*, 192, e875–e891. <http://doi.org/10.1503/cmaj.191707>
- Wynn, T., Islam, N., Thompson, C., & Myint, K. S. (2018). The effect of knowledge on healthcare professionals' perceptions of obesity. *Obesity Medicine*, 11, 20–24. <http://doi.org/10.1016/j.jobmed.2018.06.006>
- Yeh, T.-L., Chen, H.-H., Tsai, S.-Y., Lin, C.-Y., Lui, S.-J., & Chien, K.-L. (2019). The relationship between metabolically healthy obesity and the risk of cardiovascular disease: A systematic review and meta-analysis. *Journal of Clinical Medicine*, 8(8), 1228. <https://doi.org/10.3390/jcm8081228>



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